

Ecology and economy: contemporary ethical problems from a radical behaviorist point of view

Alexandre Dittrich*

Federal University of Paraná, Psychology Department. Curitiba, PR, Brazil

Abstract: From a radical behaviorist perspective, prescriptive ethics deals with two main axes or dimensions: (1) the effects of what we do over ourselves and over other people; and (2) the effects of what we do considered along the time. This paper aims to describe how progressively complex verbal controls are affecting our behavior in relation to these two axes, taking ecology and economy as contemporary examples. We conclude that such verbal controls are making our ethical decisions themselves more complex. Cultures that prepare its citizens to identify the long-term consequences of its practices presumably have more chances to survive and to create relatively balanced systems of power distribution.

Keywords: radical behaviorism, ethics, ecology, economy.

We interact with the world and produce consequences – we, the living beings, from amoebas to humans. Operating in the world and transforming it, as pointed out by Skinner (1981/2007), characterizes living beings.

The feeding habits of amoebas involve well-known and relatively simple behavioral processes. It “hunts” algae or plankton in the water. When it detects the presence of plankton, for example, an amoeba moves towards these organisms, extends parts of its body as if they were arms (that is why they are called pseudopodia), captures and ingests the plankton. Once its digestion is completed, the substances with no nutritional value are returned to the environment.

The simple nutritional behavior of amoebas immediately operates in the environment and transforms it. An amoeba, by feeding, improves its chances of survival and leaves a different world for itself and for all other living beings: a world with less plankton (and with a little amount of waste materials).

Besides this immediate effect, there is a legacy from an amoeba's behavior that extends through time. Its behavior of ingesting plankton is a small part of the evolution of species by means of natural selection. The physiological and behavioral characteristics of amoebas that help it capture and digest nutritious substances are presumably more likely to stay in its phylogenetic makings. (likewise, the characteristics of plankton that protect them from amoeba's attacks tend to be favored).

We see therefore that, even in the first and most basic level of selection by consequences, it is possible to identify two important characteristics in the behavior of organisms: (1) it affects other organisms besides the one presenting these behaviors; (2) it has its effects extended

throughout time. To live is to operate: it is to produce consequences not only for oneself, but also for other living beings; immediate consequences, but also consequences that extend themselves throughout time.

Descriptive ethics

How is ethics concerned with this?

There is a part of ethics, which is normally called descriptive ethics, whose objective is solely to explain the behavior of organisms – especially, of course, human beings. We might say, as the philosophers do as a general rule, that the goal of descriptive ethics is to specifically explain ethical behavior, but that would mean we would have the hard task of distinguishing between ethical and non-ethical behavior (which would not mean to distinguish between good and bad behavior, but rather behavior that is controlled by both ethical and non-ethical variables). It would be possible to use several criteria in this distinction. This task, however, besides being expensive, may be of little use, or even counterproductive. From a radical behaviorist perspective, descriptive ethics is the field of the selection of behaviors by its consequences – and Skinner's explanation (1971b) for ethical behavior includes three selection levels: phylogenetic, ontogenetic, and cultural. Everything we do, everything we like and wish for us and others is only understandable when these three selective stories are combined. Treating ethics as a special quality of our behavior (or as a characteristic that is only reserved to part of our behavioral repertoire) may take our attention from what really matters in descriptive ethics: to explain our behavior via selection by consequences, in three conjugated levels.

The long history amoebas and plankton are part of – the history of the evolution of species by means of natural selection – is indispensable for understanding why us,

* Corresponding address: alexandredittrich@gmail.com

human beings, do what we do, feel what we feel, choose what we choose. Stating this does not mean to subscribe to any biological reductionism. Natural selection is only the first out the three selective stories that interest us, and each selective story creates the conditions for the next to arise: phylogenesis creates the conditions for ontogenesis, and this for cultural selection (Skinner, 1981/2007). Understanding the interactions among the variables relevant to each of these levels is a considerably more complex task than explaining the behavior of amoebas – which, it is worth mentioning, makes the task of descriptive ethics equally more complex, especially in regards to human beings.

The evolution of a special kind of operating behavior – verbal behavior – adds variables that are especially relevant for explaining ethical behavior. Firstly, because descriptive ethics also needs to explain the occurrence of certain verbal behavior instances we usually call ethic. Whether it is possible and useful to precisely distinguish ethical from non-ethical verbal operants, descriptive ethics is also interested in knowing, for example, why people give verbal responses such as “good” and “bad”. As there are no contingencies or special rules that establish when we should emit such responses, we may learn to emit them under the control of virtually any circumstance. Qualifying an object as good or bad comprises subtleties that require careful functional analyses of individual cases, always based on the model of selection by consequences.

Among many other functions, words such as “good” and “bad” may serve for a person or group of people to induce other people or groups of people to act certain ways – which leads us to the second part of ethics, which comprises descriptive ethics.

Prescriptive ethics

Supposedly, there are limits for what science can do in the field of ethics. Science can tell us which behaviors or behavioral trends were selected at the three selective levels, and how they were selected. In the realm of verbal behavior, for example, science may tell us what people call “good” or “bad”, and why. Besides this, science may help us foresee which behaviors will probably be selected in certain contexts. Science can also increase (or decrease) the likelihood of several classes of behaviors, in case it considers this is good. But how to tell whether something is “good”? Scientific knowledge helps our decisions considerably, but it alone cannot produce (nor will it supposedly one day produce) answers to this important question we insistently ask: “And now, what shall we do?” Or also: “What is the good path, the best course of action?”¹

Questions like these were asked by many people before philosophy arose, and they are still being asked by

many people with no philosophical background. It would be absurd to only assign philosophers (or people with a philosophical background) to answer these questions. However, prescriptive ethics is nowadays identified as the philosophical field in which this question is focused on as a privileged object of reflection.

Descriptive ethics is generally identified as the field of facts, or of what is (for example, we know that a certain person drinks alcohol and says alcoholic beverages are good) and prescriptive ethics is generally identified as the field of values, or of what it should (or should not) be (for example, someone states that a certain person should (or should not) drink alcohol. Skinner (1971b) and several other authors (Garrett, 1979; Graham, 1977, 1983; Hocutt, 1977; Rottschaefer, 1980; Vargas, 1982; Waller, 1982) discussed this distinction and its implications, but we do not aim to focus on these discussions here. For now, it suffices to recognize that the basic question of prescriptive ethics – “What should we do?” – is obviously important, and that we do not have ready answers for it.

Philosophy has operated, since the classic Greek philosophers, through binary distinctions that define its basic fields of interest: “true” or “false” (epistemology, logic), “beautiful” or “ugly” (aesthetics), and, finally “good” or “bad” (ethics). Behavior analysis identifies in all these cases (and in any other cases that are submitted to analysis) the presence of positive and negative reinforcers. As a general rule, the objects and events we call true, good, and beautiful are those that reinforce their production, and the objects and events that we call false, ugly, or bad are those we escape from or avoid. The possible exceptions (and they certainly exist) deserve additional analyses, especially considering the complex variables that operate on verbal behavior. However, what is important to point out here is that epistemology, aesthetics, and ethics deal with behavior and with the variables that selectively operate on behavior.

This does not imply reducing, despising, or belittling the wealth of human experience. As Skinner (1986/1987a) insisted in pointing out, we may go through several experiences in our contact with the variety in the world – calling objects and events beautiful, pleasant, transcendent, etc. – but this contact also has a relevant effect on the form and frequency of response classes that our repertoires comprise.

Not only do we call objects or events “good” or “bad”, but we also use these very words as reinforcing or punishing stimuli (Skinner, 1953/1965, p. 324). Both philosophers and lay people usually call such behaviors “assigning values” – which only means, even etymologically, to say something is either good or bad. Such naming can have several functions. One of them is to generate favorable or unfavorable dispositions in other people regarding the related objects or events – in other words, to change the likelihood of certain classes of responses in the relationships people establish with these objects or events.

Such behavioral processes are relevant, in the first place, to descriptive ethics. Not only we may ask why a

¹ However, it needs to be noted that Skinner suggests, at some times, that science could provide us even with these answers. We discuss the subject in Dittrich (2004, chapter 3). Harris (2011) is an example of a contemporary intellectual that states that science can substantiate prescriptive ethics.

person calls any object or event “good” or “bad”, but also – for example – why this person tries to create favorable dispositions in regards to such objects or events. Questions like these may, in principle, have satisfactory descriptive answers through the application of the model of selection by consequences to specific examples. (this same model prevents generic answers that can be applied to all cases and all people). Let’s get back to the example of the person who frequently drinks alcohol. This person may also say that alcoholic beverages are “good”, or induce other people to drink them (they can also say they are “bad” and induce other people not to drink them). Supposedly, it is possible to understand why this person does it by conjugating phylogenetic variables (organic characteristics may cause alcohol to produce effects in this person that it would not produce in other people), ontogenetic variables (for example, drinking alcohol in pleasant occasions, social reinforcement of drinking), and cultural variables (for example, high availability and easy access to alcoholic beverages, valuing alcohol-drinking as a proof of virility in certain cultures, etc.).

But we may also take a step behind and notice that situations like these allow for another type of question: what *should* we consider good? Let’s see other examples: (1) a person tries to convince another person to steal a medication from a store that belongs to a large retail chain. Is this piece of advice (and the very act of stealing) good or bad? Why? (2) a group of vigilantes captures a teenager who stole something and chains this youngster to a lamp-post, naked. Is this good or bad? Why? (3) We find several perspectives on the practice of abortion in our society. Should it be allowed? Only under certain circumstances? Why?

These are the types of questions prescriptive ethics is concerned with: why *should* (or *shouldn’t*) we do this or that? Supposedly, there are no empirical answers to this type of question.² Despite this (or even because this), human cultures have evolved up to the point of employing a great deal of their time and resources exactly to answer questions such as these – if not because of another reason, because they are inescapable. The alternative would be irrationality, a return to mere animality. Amoebas live their lives with no need whatsoever for concerning with problems of this nature. As it happens to us, everything they do produces consequences that are extended throughout time, to them and to “the others”, but this does not seem to create any ethical problems to them, any need to legislate or judge, to classify things and events as either “good” or “bad”. What makes us different from them?

This is a kind of response that is common to psychology and to human sciences: unlike amoebas, we have consciousness. This is not a satisfactory answer, inasmuch as one does not specify what it is to “have consciousness”. Behavioral analysts, when called to explain the “meaning” of terms regarding supposed mental phenomena,

usually identify the circumstances that control the emission of such terms (Skinner, 1945/1972b). By doing this, they produce plausible, non-essentialist, and useful³ explanations for these terms, by identifying behavioral processes as their “referents”. The possible “meanings” of these terms correspond to the situations that may control their emission.

“Conscious behavior” may be interpreted in several ways, but the definition most frequently mentioned by behavioral analysts points towards the importance of verbal communities in “being aware” – of oneself, the others, and the world⁴ (for an excellent explanation of the subject, please refer to Zilio, 2011). Within behavioral analysis, it is possible to propose the existence of non-verbal forms of consciousness (as done by Zilio, 2011), but the importance of verbal behavior to understand behavioral relationships which are generally called “conscious” is evident. Being (verbally) conscious is to be capable of verbally describing oneself.

As pointed out in the model of selection by consequences proposed by Skinner (1981/2007), verbal behavior considerably extends the horizons of our experience, putting our behavior as a whole under the control of variables that could not otherwise act – or, simply put, “making us aware” of these variables.

Prescriptive ethics in radical behaviorism

From a radical behaviorist perspective, prescriptive ethics deals with two basic axes or dimensions: (1) the effects of what we do to ourselves and to others; (2) the effects of what we do as considered throughout time. In any circumstance we individually or collectively ask “what should I (we) do?”, the answer should refer to the effects of this action on ourselves (now and in the future) and on others (now and in the future).

As a general rule, we consider the people who “are conscious” that their behavior (1) has effects not only to themselves, but also to other people; (2) has effects that are not only immediate, but also extended throughout time ethically better, or more ethically polite. Mere “consciousness”, however, does not ensure the occurrence of behaviors we could call ethical – because, as behavioral analysts know, there are relevant functional differences between saying and doing (Beckert, 2005). Popularly, this is translated into expressions such as “You are what you do, not what you say you’ll do”, “they did not mean it”, “talk is cheap”, etc.⁵. However, any expansion of the ethical horizons of humanity in the two dimensions recently pointed out necessarily takes place due to increasingly complex verbal controls. Without them, it would be impossible for mankind to take advantage of the long-term effects of its practices in order to re-plan these same practices.

3 On the usefulness of these interpretations, please refer to Strapasson, Carrara, and Lopes Júnior (2007).

4 For an excelente explanation about this subject, refer to Zilio, 2011

5 For behavior analysts, speaking is also doing but this doesn’t dissolve the sense of these expressions

2 Please refer to footnote 1.

Education is a fundamental part of any cultural planning process. To ethically educate a child greatly consists of verbally pointing out the immediate and delayed effects from what this child does, to itself and to others. The child prefers sweets to fruit, but this may cause him health problems. He/she wants to play with a toy alone, thus preventing other kids from also playing with it. They do what they want “without thinking”, but hurt their parents, put their physical integrity at risk, put other children in danger, etc. Parents know perfectly how many times situations like these are repeated. Ethical education is a demanding process – which continues, of course, even in the absence of the parents. In fact, it is a process we are all submitted to for all our lives. What we do in our adult lives keeps having effects not only to ourselves, but also to others, now and in the future. Verbal control by organized agencies, besides the family, resumes our process of expanding our ethical horizons. The school, the government, religion, science, the media, and several other groups, organized or otherwise, point towards others and to the future, in different ways and with different purposes.

Although ethical education is not a recent practice along these lines, current science and technology give an unprecedented visibility to the connections between what we do and the effects of this to us and to the others, now and in the future. We are fully prepared, in phylogenetic terms, to be affected by the immediate effects of what we do, especially to ourselves. The more the effects of what we do are extended in time, and the more they affect people who are not close to us, the higher is the likelihood of us ignoring them – that is, the higher the likelihood that they do not affect our behavior.

Verbal behavior and expansion of ethical horizons

Until a few centuries ago, a person could generically refer to “mankind”, but what they knew about mankind was limited by their geographical mobility or by how little this person heard or read (when they could read) about other peoples. No one, of course, can fully know “mankind”. In this sense, this concept will always be abstract – however, an average person nowadays can “be conscious” of mankind in ways that would be impossible a few centuries ago.

This was only possible due to the several scientific and technological innovations that were produced throughout history: books, the press, radio and television broadcasting, computers, the Internet, etc. Creations such as these caused the verbal control on our behavior to grow even further, overcome geographical barriers that were insurmountable before, and to increase the horizons of our speaking and writing, or our listening and reading.⁶ The overthrowing of a president, a natural disaster,

a relevant trial, the death of a celebrity: we immediately know about them, we follow them up live, we retransmit them, and give our opinions. We hear and read, speak and write about these and countless other subjects; we influence others and are influenced via verbal behavior. In a nutshell, we live in the so-called “Information Age” (e. g., Alberts & Papp, 1997), and information is verbal behavior.

Part of the information we have access to through such advancements has scientific origins. The quality degrees of scientific information given by the media are very variable, and this deserves the attention of the scientific community itself⁷ (please refer to, for example, Goldacre, 2013). Leaving this discussion aside, there is no doubt about the fact that the media has a considerable power of transforming behaviors through verbal practices – and the media may do this while responding to the most varied interests.

The media occasionally seeks to transform behaviors by “bringing the future to the present” – that is, making evident what would otherwise never be: the relationships between what we do now and the effects from that to the others and to the future. Science has an especially relevant role when it points out the evidence from such relationships, but the bridge between the academic world and the general public is built, as a general rule, by science communication. If, as pointed out by Skinner (1977/1978b), “people act to improve cultural practices when their social environments induce them to do so” (p. 14), science communication is undoubtedly an important part of this induction process⁸.

Bringing the future into the present: Ecology

The scientific production in the ecology field, especially in regards to the human influence on global warming, illustrates such facts. Human beings would never “spontaneously” establish any causal relationship between their production and consumption practices and global warming. Science is a special cultural practice exactly because it shows causal relationships which are not evident.

challenges, the world literacy rates have significantly improved over the last few decades (UNESCO, 2012). In ancient Greece and Rome, literacy was extremely rare, and it was restricted to political and religious elites (Harris, 1991). Literacy is crucially important for the development of several relevant aspects of human behavior (UNESCO, 2003), and behavior analysis, it is worth pointing out, has given important contributions to this field (e. g., Mauad, Guedes, & Azzi, 2004; De Rose, 2005). Democracy, in turn, implies the free circulation of information and opinions, their confrontation, the freedom to evaluate them, discuss them, etc. In practice, several variables make the process less free and transparent than one would desire, but the contrast to what happens in totalitarian regimes is obvious.

7 Please refer to, for example, Goldacre (2013).

8 It is worth noting, however, that this is not sufficient to “improve cultural practices”. Skinner (1971b, 1977/1978b) insisted on the fact that it is not enough to show the delayed effects of what we do: it is necessary to create present contingencies that induce possibly beneficial behaviors to the future of cultures. However, the media may also influence the very process of “creating present contingencies”.

6 Simultaneously to the scientific and technological advancements, it is possible to point out the increased literacy and the advancement of political democratic regimes as relevant aspects in the potentialization of the effects of verbal control on our behavior. Although there are still many

It clarifies complex relationships between variables, and by doing that it connects facts that could otherwise seem independent. The data ecological science produces nowadays give an unprecedented dimension to our *community*, our shared responsibility: a conclusion is increasingly implied that everything we do individually affects all other human beings throughout time.

But is it actually “everything”? Wouldn’t this statement be merely rhetoric, a hyperbole?

Living implies consuming resources, and this is not dependent on the economic system in force. “Consuming” literally means wearing down, destroying, or eliminating something we get in contact with – as an amoeba does with plankton. In this sense, we have always lived, since the dawn of life and mankind, in “consumer societies”. We consume resources (either natural or manufactured) when we eat, when we clean ourselves, when we move, when we have fun, when we relax, when we sleep – however, this has not always been obvious to the human beings, and awareness has been raised on this fact especially over the last few decades, especially due to the verbal behavior of scientists and science communication professionals.

Ecological science reminds us continuously that, as living beings, we are consumers, and that this has consequences that are extended throughout time for us and for all other consumers (either human or otherwise). By doing so, ecological science ends up making us responsible for the others and for the future even in intimate moments, which up until then were not taken into account – exactly because it shows the fact that we never *quit* being consumers, as long as we are alive. In an age that celebrates individuality and autonomy, ecology dissolves the boundaries between public and private ethics, and reminds us that we are all *responsible* for the future of what is public.

Despite that, it is important to remember that merely presenting such facts only produces relevant effects on the behavior of people whose selective stories have made them prone to it. Describing the connections between our behavior and its long-term effects is an important variable, which is nonetheless insufficient to produce relevant behavioral changes in our cultures. Characteristics from different cases must be evaluated in order to account for changes in behavioral probabilities. Consequences that affect us directly (whether they are natural or planned) produce behavioral effects that are more solid than the ones produced by mere descriptions – but even ecological emergencies may only produce such effects momentarily, as illustrated by Diamond (2005):

When the city of Tucson in Arizona went through a severe drought in the 1950s, its alarmed citizens swore that they would manage their water better, but soon returned to their water-guzzling ways of building golf courses and watering their gardens. (p. 505)

It is obviously preferable – and presently required – that ecologically relevant behavioral changes take place in preventive ways rather than only during localized crises. Thus, cultural planning initiatives must include the use of immediate, contingent consequences to behaviors that favor sustainability. As pointed out by Skinner (1971a), “we shall work for the survival of our culture, if at all, because of the personal goods which are effective because of our genetic endowment, as these arise naturally or as part of our cultural environment” (p. 551).

Bringing the future into the present: Economics

The connections between ecology and economics are evident, as economics studies production and consumption patterns, and these patterns are the ones that generate the long-term ecological effects we are aware of nowadays. At a time in which the economic relationships (the production and exchange of reinforcers) reach an unprecedented complexity, organized groups seek to lead people to use their countercontrol power politically as consumers and citizens⁹. We are advised to avoid products that are harmful to the environment (whether as a result from their manufacturing process or the residues of their use) and to choose “eco-friendly” products. We are informed about companies that use child or slave labor or about companies that expose their workers to degrading and unhealthy working conditions. We are reminded all time that decisions that seemed simple and “individual” before are filled with ethical implications. Buying this or that laundry detergent, shoe, or car also becomes a moral issue, because in capitalist economies, the destination consumers give to their financial resources greatly determines which production practices will be either supported or not. Beyond the consuming behavior, however, traditional ways of political participation by common citizens are also guided by such organized groups – from demands for change in environmental legislations to voting for candidates who are committed to the sustainability agenda.

The strategies from such groups are not exempted from criticism. Getting people to expand their ethical horizons, “to be aware” of the effects they cause on others and on the future, may be important – but will it be enough? To which extent does this change, for example,

9 A good example is England-based Ethical Consumer, which presents as its main goal “making global businesses more sustainable through consumer pressure”. Upon stating its mission, the organization makes it clear that it deals with consumption as a path for ethical and political action: “In a world where people feel politically disempowered, and where governments are becoming less powerful than corporations, citizens are beginning to realise that their economic vote may have as much influence as their political vote”. Nevertheless, despite stimulating consumers to “assert your own ethical values through the market”, the organization stresses that “Ethical consumerism is not a replacement for other forms of political action”, even though it is “an important additional way for people to exert their influence”. Available from <http://www.ethicalconsumer.org/aboutus/ourmission.aspx>

the behavior of consuming? Consuming is a wide and multi-determined class of behaviors¹⁰, and even though we sympathize with the poor working conditions to which Chinese workers who manufacture tablets are exposed, this may not be enough to change our decisions as consumers. We are not required to seek information on the manufacture processes of what we buy, and it would be even impossible to do that in regards to everything we consume. None will criticize us directly for buying this or that product, even if it is harmful, as it is our right as consumers. We may even do that without leaving our homes – and, after all, we have not asked for things to be as they are: we are not personally responsible for the problems in the productive system, and we do authorize or agree to any kind of injustice – and, besides this, we need the product, we want the product, and it is the product that is before our eyes, with its bold design, its shining package, and its qualities varnished by marketing – not the history of its production or the sub-products of its consumption. This is a good example of what Marxists want to show when they mention the “contradictions of capitalism”. Companies are not charities. They do what the current contingencies in capitalist economies recommend them to do: maximize the financial returns to their shareholders, within (and occasionally outside) the legal frameworks that regulate their activities (Diamond, 2005, p. 577).

The strategy of showing consumers the processes involved in the production and consumption of certain products is based on the very “market laws”: if a significant group of consumers stops buying a certain product and also gives negative feedback about it (which may be potentialized nowadays by online communication), the company that manufactures it could address the problem only for maintaining its clients – and its revenue, as a consequence¹¹. The success of this strategy varies from case to case, but the “economic vote” seems a clear countercontrol practice by organized citizens in regards to cultural practices whose harmful effects would be clear.

¹⁰ Please refer to, for example, Foxall, Oliveira-Castro, James, Yani-de-Soriano, and Sigurdsson (2006).

¹¹ Among the countless examples in which this strategy worked or has worked, the one of American sporting goods company Nike is especially emblematic (Birch, 2012). The analysis of topics like this may be extended – as it frequently is – to the discussion of political and economic models. Wouldn't strategies such as this one only be masking the true problem – that is, the very existence of the capitalist model? The attempts at fully nationalizing the economic activity seemingly had negative results in several countries, and they were accompanied by political regimes that were not really partial to democracy. This, of course, does not prevent that new versions of socialism be defended. People who adopt this posture may even state that anything that is done in order to improve the lives and happiness of people in capitalist societies will end up deepening and disguising the injustices in capitalism – and, as we observed elsewhere, “a Marxist can always state capitalism is near its end; to that end, it suffices that capitalism exists” (Dittrich, 2010, p. 49). For such people, only the radical reformulation of the political and economic grounds of national economies – maybe all of them – is likely to be accepted as a long-term solution.

Control, countercontrol, and the “fourth estate”

In market economies that are regulated and inspected by state agencies, we naturally focus on companies and governments when we are, for any reason, interested in the economy and its collective effects throughout time. Skinner (also mentioning religion) seemed to be very pessimistic in regard to such agencies:

Governments, religions, and capitalistic systems, whether public or private, control most of the reinforcers of daily life; they must use them, as they have always done, for their own aggrandizement, and they have nothing to gain by relinquishing power. (1987b, p. 7)

The holders of economic power, the ones who have money, will continue using it to produce quick profits, with no concern whatsoever to global problems As for politicians, they are always worried about their next election, and therefore, unwilling to support sacrifices today in order to preserve the future. (1983, p. 4)

Considering this perspective, Skinner pointed out the importance of countercontrol agents he collectively called the “fourth estate” (as opposed to the three classic “estates”: government, economy, and religion (1983, p. 4; 1989, p. 120). Skinner mentions scientists, intellectuals, professors, and journalists as components of this “fourth estate”, also assigning them as “the uncommitted” (1987b, p.8). It should be noted that nowadays new and important social players join the fourth estate, in Brazil and other countries. The presence and influence of non-governmental organizations is increasingly clear, and the countercontrol in regards to traditional press agencies has grown considerably, through the rise of alternative journalism and opinion groups. Several of these groups and organizations arise as a result of civil society dissatisfaction, which represents a healthy signal of advancement in the dynamics of control and countercontrol in democratic societies.

According to Skinner, “the uncommitted” “have little or no power and hence little or nothing to gain from the present” (1973/1978a, p. 28). They share a detachment in regards to the present and are, therefore, “free to consider a more remote future” (1987b, p. 08), but “only to the extent that it is not controlled by the current interests of a government, religion, or economic system” (1973/1978a, p. 28). Politicians, businesspeople, and religious groups may also take part in this group, but “only to the extent that they are uncommitted to their respective institutions” (1987b, p. 08). Obviously, the double strain between immediate and long-term consequences, and between individual and collective consequences, constitutes the context for Skinner's analysis on “the uncommitted”. It is with these consequences that different persons and groups are either committed or

uncommitted to – that is, it is under their direct or indirect control that people or groups act.

Just as we may be skeptical about companies and governments, we may and must be skeptical in regards to the degree to which a person or group that supposedly belongs to the “fourth estate” is “uncommitted”. Skinner himself pointed out that this skepticism is almost inevitable, given a continuous history of power being used, in all its forms, to satisfy personal and short-term interests:

A disinterested consideration of cultural practices from which suggestions for improvement may emerge is still often regarded as impossible. This is the price we pay for the fact that men (1) have so often improved their control of other men for purposes of exploitation, (2) have had to bolster their social practices with spurious justifications and (3) have so seldom shared the attitudes of the basic scientist. (1961/1972a, pp. 48-49)

Despite such skepticism, there is no doubt regarding the importance in the existence and growth of counter-control instances in democratic societies, in order to avoid excessive concentration of power. Stage agents have always practiced active and passive corruption, and market agents have always sought to produce profits, occasionally in disagreement with the public interest, within or outside established legal frameworks. The agencies in the fourth estate are not free from their own commitments, and these may not always coincide with the long-term collective interest. It is therefore reasonable to suggest that the main demand to be put forth to governments, companies, and agencies in fourth estate is to continuously increase the transparency degree of their activities. Secret votes, undeclared funding and “inspections” with obscure criteria undermine and weaken the balance in the relationships of control and countercontrol between citizens and public and private institutions. The maintenance of this balance, by avoiding excessive concentration of power, may ensure the survival of democratic cultures.

Conclusion

Not only has the progress of science and technology potentialized the long-term effects of what we do, but also our very consciousness about such effects. In the so-called Information Age, progressively more complex verbal controls, which have largely been produced by science and advertised in the media, have been expanding our ethical horizons – and making our ethical decisions equally more complex. Such verbal controls show the connections between what we do individually or in group and the effects of this to us and to other people throughout time.

Since Skinner’s initial analyses (1953/1965) on social and cultural phenomena, behavior analysis has insisted on the importance of considering such effects in cultural design. Obviously, behavior analysis is not doing this alone, and the existence of cultural practices that point towards the importance of planning the cultures themselves is not casual. The evolution of cultures, which is built based on the phylogenetic and ontogenetic heritage of their members, resumes selective processes that produce a “progressive sensitivity from organisms and people to the consequences of their actions” (Abib, 2001, p. 111) and an “education for self-control” (p. 116) which reflects such sensitivity.

Cultures that teach their citizens to identify the long-term consequences of their practices presumably have more chances of surviving and creating relatively balanced systems of power distribution through control and counter-control practices. Agencies in the so-called “fourth estate” have an important role in the maintenance of this balance, especially when they push companies and governments into being transparent in their activities – however, this requirement for transparency must be extended to the agencies in the “fourth estate” themselves. As much as possible, we must make the commitments of all players who are part of the set of forces in contemporary societies clear, in order to produce some balance between private and public, immediate and long-term interests. Clarifying the “motivations” that control the behavior of such players requires the analysis of the behavioral contingencies they are part of.

Ecologia e economia: problemas éticos contemporâneos a partir de um ponto de vista behaviorista radical

Resumo: Para o behaviorismo radical, a ética prescritiva lida com dois eixos ou dimensões básicas: (1) os efeitos do que fazemos sobre nós mesmos e sobre os outros; e (2) os efeitos do que fazemos considerados ao longo do tempo. O presente artigo visa apontar como controles verbais progressivamente mais complexos afetam nosso comportamento em relação a esses dois eixos, tomando a ecologia e a economia como exemplos contemporâneos. Conclui-se que tais controles verbais tornam nossas próprias escolhas éticas mais complexas. Culturas que ensinam seus cidadãos a identificar as consequências de longo prazo de suas práticas presumivelmente têm mais chances de sobreviver e de criar sistemas relativamente equilibrados de distribuição de poder.

Palavras-chave: behaviorismo radical, ética, ecologia, economia.

Ecologie et economie: problèmes contemporaines d'éthique sous un point de vue behavioriste radical

Résumé: Pour le behaviorisme radical, l'éthique prescriptive a deux axes ou dimensions fondamentaux: (1) les effets de ce qu'on fait à soi-même ou aux autres; et (2) les effets de ce qu'on a fait au fil du temps. Cet article se propose d'exposer – avec des exemples actuels de l'écologie et de l'économie – de quelle façon les contrôles verbaux progressivement plus complexes affectent notre comportement en face de ces deux axes. On en conclut que ces contrôles verbaux produisent des choix éthiques plus complexes. Des cultures qui enseignent leurs citoyens que les pratiques culturelles ont des conséquences à long terme peuvent survivre plus longtemps, ainsi que créer systèmes de pouvoir relativement équilibrés.

Mots-clés: behaviorisme radical, éthique, ecologie, economie.

Ecología y economía: problemas éticos contemporáneos desde un punto de vista conductista radical

Resumen: Para el conductismo radical, la ética prescriptiva lidia con dos ejes o dimensiones básicas: (1) los efectos de nuestra acción sobre nosotros y sobre otras personas; y (2) los efectos de nuestra acción con el paso del tiempo. Este artículo visa señalar como controles verbales progresivamente más complejos afectan nuestra conducta en relación a estos dos ejes, tomando la ecología y la economía como ejemplos contemporáneos. Concluimos que estos controles verbales tornan nuestras propias elecciones éticas más complejas. Culturas que enseñan sus ciudadanos a reconocer las consecuencias de largo plazo de sus prácticas presumiblemente tienen más chances de sobrevivir y crear sistemas relativamente equilibrados de distribución de poder.

Palabras clave: conductismo radical, ética, ecología, economía.

References

- Abib, J. A. D. (2001). Teoria moral de Skinner e desenvolvimento humano. *Psicologia: Reflexão e Crítica*, 14(1), 107-117.
- Alberts, D. S., & Papp, D. S. (Orgs.). (1997). *The information age: An anthology on its impacts and consequences*. Washington, DC: National Defense University.
- Beckert, M. E. (2005). Correspondência verbal/não-verbal: pesquisa básica e aplicações na clínica. In J. Abreu-Rodrigues, & M. R. Ribeiro (Orgs.), *Análise do comportamento: pesquisa, teoria e aplicação* (pp. 229-244). Porto Alegre, RS: Artmed.
- Birch, S. (2012, 6 de julho). How activism forced Nike to change its ethical game. *The Guardian*. Recuperado de <http://www.theguardian.com/environment/green-living-blog/2012/jul/06/activism-nike>
- De Rose, J. C. C. (2005). Análise comportamental da aprendizagem de leitura e escrita. *Revista Brasileira de Análise do Comportamento*, 1, 29-50.
- Diamond, J. (2005). *Colapso: Como as sociedades escolhem o fracasso ou o sucesso* (A. Raposo, trad.). Rio de Janeiro, RJ: Record.
- Dittrich, A. (2010). Análise de consequências como procedimento para decisões éticas. *Perspectivas em Análise do Comportamento*, 1(1), 44-54.
- Dittrich, A. (2004). *Behaviorismo radical, ética e política: Aspectos teóricos do compromisso social*, vol. 1. (Tese de doutorado). Universidade Federal de São Carlos. Recuperado de <http://www.dfmc.ufscar.br/uploads/publications/4ef37629b6495.pdf>
- Ethical Consumer. (1989). *Our Mission*. Recuperado de <http://www.ethicalconsumer.org/aboutus/ourmission.aspx>
- Foxall, G. R., Oliveira-Castro, J. M., James, V. K., Yanide-Soriano, M. M., & Sigurdsson, V. (2006). Consumer behavior analysis and social marketing: The case of environmental conservation. *Behavior and Social Issues*, 15, 101-124.
- Garrett, R. (1979). Value conflict in a Skinnerian analysis. *Behaviorism*, 7(1), 9-16.
- Graham, G. (1983). More on the goodness of Skinner. *Behaviorism*, 11(1), 45-51.
- Graham, G. (1977). On what is good: A study of B. F. Skinner's operant behaviorist view. *Behaviorism*, 5(2), 97-112.
- Goldacre, B. (2013). *Ciência picareta* (R. Rezende, trad.). Rio de Janeiro, RJ: Civilização Brasileira.
- Harris, S. (2011). *The moral landscape: How science can determine human values*. New York, NY: Free Press.
- Harris, W. V. (1991). *Ancient literacy*. Cambridge, MA: Harvard University Press.
- Hocutt, M. (1977). Skinner on the word "good": A naturalistic semantics for ethics. *Ethics*, 87(4), 319-338.
- Mauad, L. C., Guedes, M. C., & Azzi, R. G. (2004). Análise do comportamento e a habilidade de leitura: Um levantamento crítico de artigos do JABA. *Psico-USF*, 9(1), 59-69.
- Rottschaefer, W. A. (1980). Skinner's science of value. *Behaviorism*, 8(2), 99-112.
- Skinner, B. F. (1971a). A behavioral analysis of value judgments. In E. Tobach, L. R. Aronson & E. Shaw

- (Eds.), *The biopsychology of development* (pp. 543-551). New York, NY: Academic Press.
- Skinner, B. F. (1989). A new preface to *Beyond Freedom and Dignity*. In B. F. Skinner, *Recent issues in the analysis of behavior* (pp. 113-120). Columbus, OH: Merrill.
- Skinner, B. F. (1978a). Are we free to have a future? In B. F. Skinner, *Reflections on behaviorism and society* (pp. 16-32). Englewood Cliffs, NJ: Prentice-Hall. (Trabalho original publicado em 1973).
- Skinner, B. F. (1971b). *Beyond freedom and dignity*. New York, NY: Knopf.
- Skinner, B. F. (1983). Estado de alerta máximo. *Veja*, 15 de Junho, pp. 3-6. (entrevista).
- Skinner, B. F. (1978b). Human behavior and democracy. In B. F. Skinner, *Reflections on behaviorism and society* (pp. 3-15). Englewood Cliffs, NJ: Prentice-Hall. (Trabalho original publicado em 1977).
- Skinner, B. F. (1965). *Science and human behavior*. New York, NY: Collier-Macmillan. (Trabalho original publicado em 1953).
- Skinner, B. F. (2007). Seleção por consequências. *Revista Brasileira de Terapia Comportamental e Cognitiva*, 9(1), 129-137. (Trabalho original publicado em 1981).
- Skinner, B. F. (1972a). The design of cultures. In B. F. Skinner, *Cumulative record: A selection of papers* (pp. 39-50). New York, NY: Appleton-Century-Crofts. (Trabalho original publicado em 1961).
- Skinner, B. F. (1972b). The operational analysis of psychological terms. In B. F. Skinner, *Cumulative record: A selection of papers* (pp. 370-384). New York, NY: Appleton-Century-Crofts. (Trabalho original publicado em 1945).
- Skinner, B. F. (1987a). What is wrong with daily life in the western world? In B. F. Skinner, *Upon further reflection* (pp. 15-31). Englewood Cliffs, NJ: Prentice-Hall. (Trabalho original publicado em 1986).
- Skinner, B. F. (1987b). Why we are not acting to save the world. In B. F. Skinner, *Upon further reflection* (pp. 1-14). Englewood Cliffs, NJ: Prentice-Hall.
- Strapasson, B. A., Carrara, K., & Lopes Júnior, J. (2007). Consequências da interpretação funcional de termos psicológicos. *Revista Brasileira de Terapia Comportamental e Cognitiva*, 9(2), 227-239.
- United Nations Educational, Scientific and Cultural Organization. (2003). *Literacy as freedom: A Unesco round-table*. Recuperado de http://unesco.org.pk/education/life/files/literacy_as_freedom.pdf
- United Nations Educational, Scientific and Cultural Organization. (2012). *Literacy rates are rising, but women and girls continue to lag behind*. Recuperado de <http://www.uis.unesco.org/literacy/Pages/adult-youth-literacy-data-viz.aspx>
- Vargas, E. A. (1982). Hume's "ought" and "is" statement: A radical behaviorist perspective. *Behaviorism*, 10(1), 01-23.
- Waller, B. (1982). Skinner's two stage value theory. *Behaviorism*, 10(1), 25-44.
- Zilio, D. (2011). Consciência verbal, não-verbal e fenomênica: uma proposta de extensão conceitual no behaviorismo radical. *Revista Brasileira de Terapia Comportamental e Cognitiva*, 13(1), 4-19.

Received: February 19, 2015

Revised: August 03, 2015

Approved: January 22, 2016